

# Moulton Niguel Water District

Period Ending  
March 31, 2016



**SECTION 1**

**Consolidated Information**

**SECTION 2**

**Account Profile**

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## SECTION 1

# Consolidated Information



## Investment Objectives

**Safety** – Safety of principal is the foremost objective of the investment program. Investments will be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio.

**Liquidity** – The investment portfolio will remain sufficiently liquid to meet all operating requirements that may be reasonably anticipated.

**Return** – The investment portfolio will be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into account the investment risk constraints for safety and liquidity needs.

## Chandler Asset Management Performance Objectives

The performance objective for the District is to earn a return in excess of the strategy benchmarks:

Liquid Fund: Bank of America Merrill Lynch 3-Month US Treasury Bill Index.

Limited Maturity Fund: Bank of America Merrill Lynch 1-3 Yr US Treasury/Agency Index.

Operating Reserve Fund: Bank of America Merrill Lynch 1-10 Yr US Treasury/Agency Index.



## Moulton Niguel Water District Consolidated

March 31, 2016

### COMPLIANCE WITH INVESTMENT POLICY

*This portfolio is a consolidation of assets managed by Chandler Asset Management and assets managed internally by Client. Chandler relies on Client to provide accurate information for reporting assets and producing this compliance statement.*

Category	Standard	Comment
Treasury/Agency issues	No Limit	Complies
Banker's Acceptances	≤40%; 180 days	Complies - 0.0%
Commercial Paper	A1/P1	Complies - 1.3%
Max. maturity < 270 days	25% maximum	Complies
Repurchase Agreements	≤10%; ≤1 year	Complies
Rev. Repo Agreements	≤10%; ≤90 days	Complies - 0.0%
Time CDs	110% collateral over \$100,000 or insured	Complies - 0.0%
Negotiable CDs	30% max; ≤2 yrs	Complies - 0.0%
Medium Term Notes	"A"-rated; 30% max	Complies - 20.0%
Mutual Funds	≤20%	Complies - 1.1%
LAIF	Not used by outside adviser; \$50 million maximum imposed by LAIF	Complies
Mortgage Pass Through, including CMOs and ABS	"AA"-rated; 20% Maximum	Complies - 6.8%
Money Market Funds	"AAA"-rated or SEC reg.; 20% Maximum	Complies
Inverse floaters, range notes	Prohibited	Complies
Interest only strips	Prohibited	Complies
Zero interest accruals	Prohibited	Complies
Per issuer max	5% (except gov'ts)	Complies
Modified duration	+/- 20% of 1-10 Year benchmark duration	Complies - 2.54
% invested less than 2 years	≥10%	Complies - 40.0%
% invested beyond 5 years	≤40%	Complies - 18.6%
Maximum maturity	10 years	Complies
Maximum maturity of corp.	5 years	Complies



## Portfolio Characteristics

### Moulton Niguel Water District Consolidated

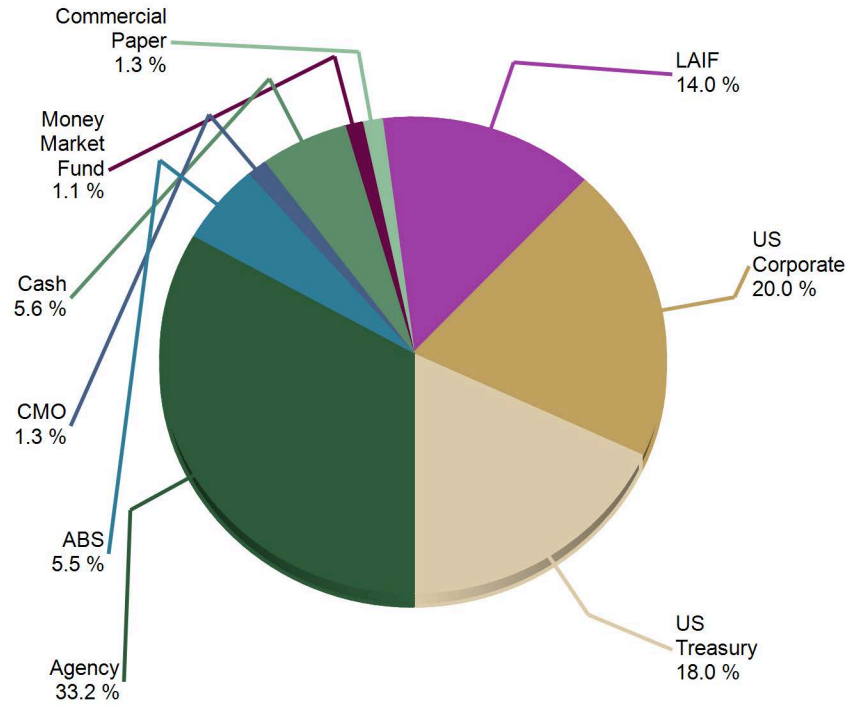
	03/31/2016	12/31/2015
	Portfolio	Portfolio
Average Maturity (yrs)	2.79	2.87
Modified Duration	2.54	2.60
Average Purchase Yield	1.54 %	1.59 %
Average Market Yield	1.00 %	1.37 %
Average Quality	AA/Aa1	AA/Aa1
Total Market Value	137,826,979	136,455,638



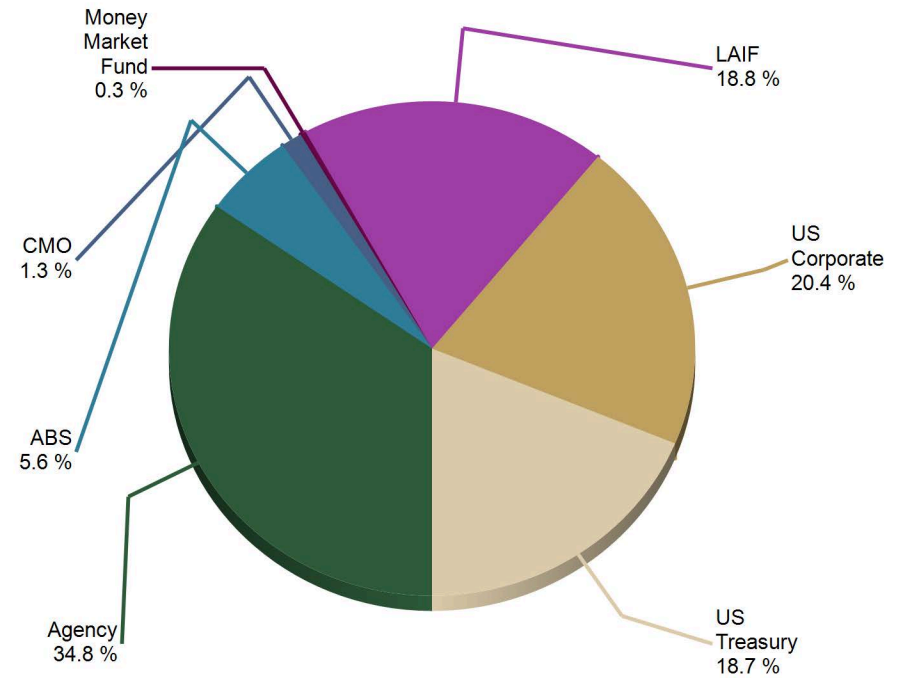
# Sector Distribution

## Moulton Niguel Water District Consolidated

March 31, 2016



December 31, 2015





# Issuers



**Moulton Niguel Water District Consolidated  
Account #43**

## Issuer Report

As of 3/31/2016

Issue Name	Investment Type	Avg Mkt Yield	Avg Maturity	% Portfolio
Government of United States	US Treasury	1.22%	4.87	17.99 %
Local Agency Investment Fund	LAIF	0.51%	0.00	14.00 %
Federal Home Loan Bank	Agency	1.22%	4.18	9.94 %
Federal Home Loan Mortgage Corp	Agency	1.04%	3.42	8.16 %
Federal National Mortgage Association	Agency	1.16%	3.99	6.92 %
Bank Cash Account	Cash	0.00%	0.00	5.65 %
Tennessee Valley Authority	Agency	1.38%	4.35	5.35 %
Federal Farm Credit Bank	Agency	0.73%	1.83	2.82 %
John Deere ABS	ABS	1.15%	2.71	2.21 %
General Electric Co	US Corporate	0.89%	1.39	1.57 %
Honda ABS	ABS	1.03%	2.23	1.55 %
ChevronTexaco Corp	US Corporate	1.23%	2.02	1.42 %
Qualcomm Inc	US Corporate	1.50%	3.64	1.34 %
Federal Home Loan Mortgage Corp	CMO	1.25%	2.40	1.30 %
Rabobank Nederland NV NY	Commercial Paper	0.71%	0.22	1.27 %
Bank of New York	US Corporate	1.57%	3.45	1.23 %
Honda Motor Corporation	US Corporate	1.40%	2.53	1.19 %
Charles Schwab Corp/The	US Corporate	1.16%	1.94	1.19 %
Intel Corp	US Corporate	0.87%	1.71	1.15 %
Wells Fargo Adv Govt Money Market Fund	Money Market Fund FI	0.02%	0.00	1.11 %
Apple Inc	US Corporate	0.90%	2.09	0.91 %
JP Morgan ABS	ABS	1.23%	4.04	0.90 %
US Bancorp	US Corporate	1.32%	2.63	0.90 %
Cisco Systems	US Corporate	1.12%	2.92	0.90 %
Toyota Motor Corp	US Corporate	1.35%	2.80	0.89 %
JP Morgan Chase & Co	US Corporate	1.67%	2.83	0.89 %
Deere & Company	US Corporate	1.40%	2.70	0.87 %
Paccar Financial	US Corporate	1.33%	1.94	0.81 %
Toyota ABS	ABS	1.01%	2.04	0.80 %
Coca Cola Co.	US Corporate	0.77%	0.42	0.78 %
Berkshire Hathaway	US Corporate	1.74%	4.96	0.78 %
Pepsico Inc	US Corporate	1.34%	4.08	0.72 %
Google Inc	US Corporate	0.68%	0.13	0.71 %





# Issuers Continued



Moulton Niguel Water District Consolidated  
Account #43

## Issuer Report

As of 3/31/2016

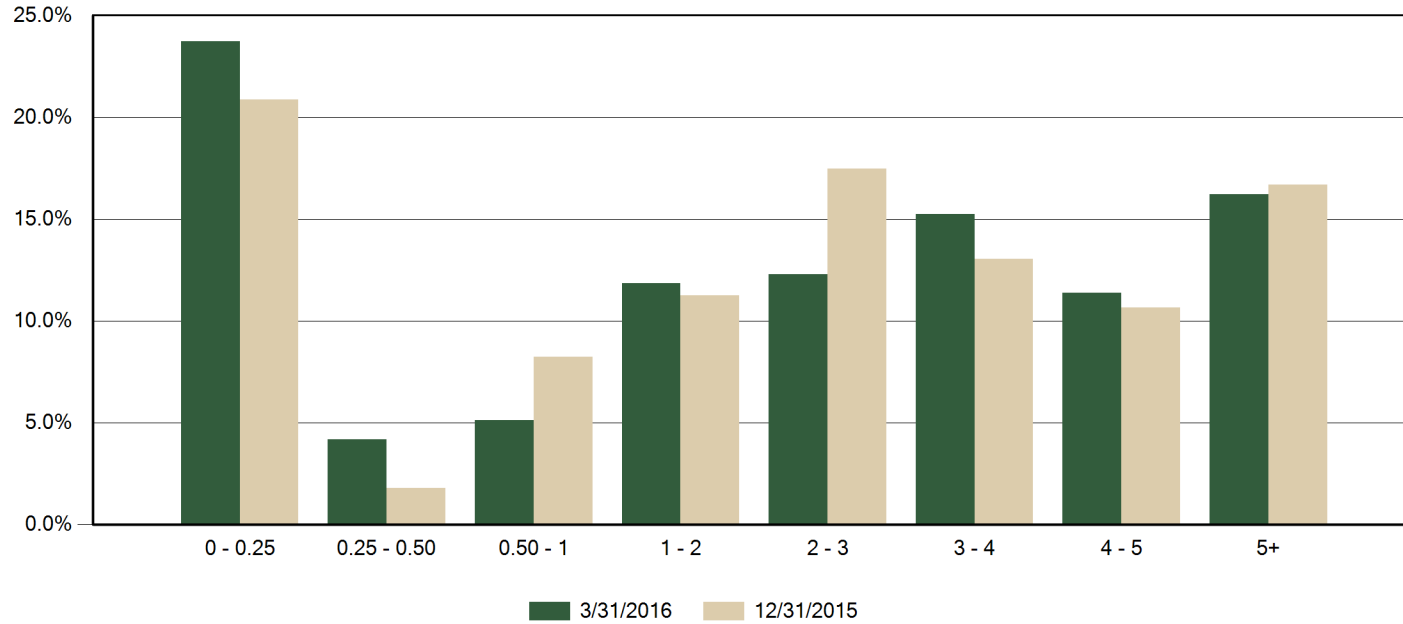
Issue Name	Investment Type	Avg Mkt Yield	Avg Maturity	% Portfolio
Wal-Mart Stores	US Corporate	0.75%	2.03	0.62 %
HSBC USA Corp	US Corporate	1.72%	1.80	0.57 %
Wells Fargo Corp	US Corporate	1.17%	1.80	0.29 %
Air Products & Chemicals	US Corporate	1.20%	1.54	0.22 %
United Technology Corp	US Corporate	0.96%	1.17	0.08 %
<b>Total</b>		<b>1.00%</b>	<b>2.79</b>	<b>100.00 %</b>



# Duration Distribution

## Moulton Niguel Water District Consolidated

March 31, 2016 vs. December 31, 2015



	<b>0 - 0.25</b>	<b>0.25 - 0.50</b>	<b>0.50 - 1</b>	<b>1 - 2</b>	<b>2 - 3</b>	<b>3 - 4</b>	<b>4 - 5</b>	<b>5+</b>
<b>3/31/16</b>	23.7 %	4.2 %	5.1 %	11.8 %	12.3 %	15.2 %	11.4 %	16.2 %
<b>12/31/15</b>	20.9 %	1.8 %	8.2 %	11.2 %	17.5 %	13.0 %	10.7 %	16.7 %



## SECTION 2

### Account Profile



## PORTFOLIO CHARACTERISTICS

### Liquid Fund

	BAML 3-Month US Treasury Bill Index	Liquid Fund	
	3/31/2016	3/31/2016	12/31/2015
Portfolio book value	--	\$19,267,760	\$25,709,540
Market value	--	\$19,294,839	\$25,718,631
Net Contribution/Withdrawal for the Period	--	(\$6,448,281)	--
Average book yield	--	0.51%	0.42%
Average maturity (yrs)	0.13	0.00	0.00
Modified duration	0.13	0.00	0.00
\$ change in value for 1% change in rates	--	\$0	\$0
% maturing within one year	100%	100%	100%
Average credit quality	AAA	Not Rated	Not Rated

### Limited Maturity Fund

	BAML 1-3 Yr US Treasury/Agency Index	Limited Maturity Fund	
	3/31/2016	3/31/2016	12/31/2015
Portfolio book value	--	\$17,002,501	\$19,209,387
Market value	--	\$16,738,154	\$18,899,083
Net Contribution/Withdrawal for the Period	--	(\$2,300,320)	--
Average book yield	--	1.08%	0.99%
Average maturity (yrs)	1.82	1.32	1.39
Modified duration	1.78	1.21	1.29
\$ change in value for 1% change in rates	--	\$202,532	\$243,798
% maturing within two years	55.2%	72.5%	68.3%
Average credit quality	AAA	AA+/Aa1	AA/Aa1



## PORTFOLIO CHARACTERISTICS

### Operating Reserve Fund

	BAML 1-10 Yr US Treasury/Agency Index	Operating Reserve Fund	
	3/31/2016	3/31/2016	12/31/2015
Portfolio book value	--	\$91,501,462	\$91,140,891
Market value	--	\$94,009,044	\$91,837,924
Net Contribution/Withdrawal for the Period	--	(\$1,555)	--
Average book yield	--	1.97%	2.04%
Average maturity (yrs)	3.92	3.85	3.97
Modified duration	3.67	3.51	3.60
\$ change in value for 1% change in rates	--	\$3,299,717	\$3,306,165
% maturing within two years	22.4%	17.0%	13.4%
Average credit quality	AAA	AA/Aa1	AA/Aa1



## SECTION 3

# Economic Update



## ■ Federal Open Market Committee (FOMC)

- The Federal Open Market Committee (FOMC) left policy rates unchanged in March. The tone of the FOMC policy statement was largely dovish and the Committee's consensus forecast for the year-end target federal funds rate was revised down to a level more closely aligned with market expectations. The FOMC's median forecast now implies two rate hikes in 2016 versus the previous forecast of four rate hikes.

## ■ Labor Markets

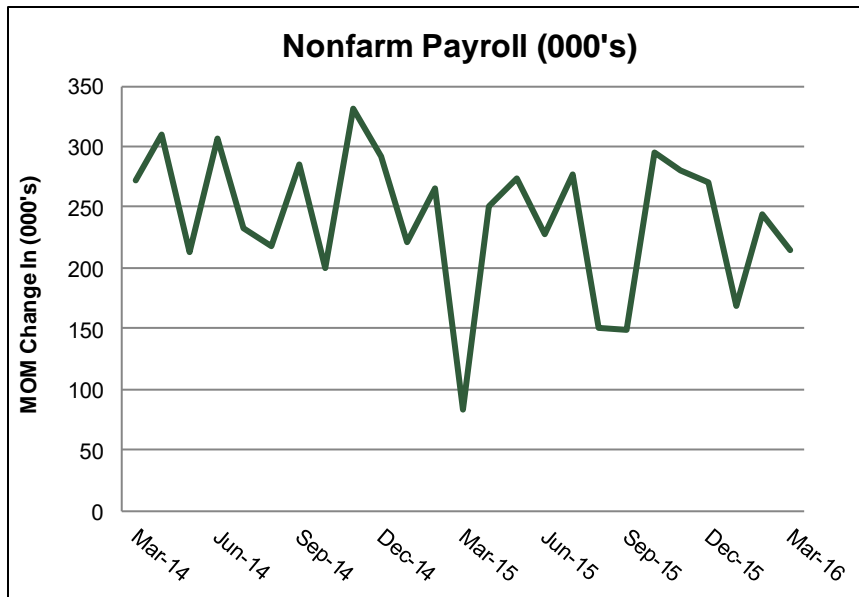
- Labor market trends continue to improve, consumer confidence is strong, and housing trends remain healthy. In addition, manufacturing trends seem to be improving. Payrolls have increased by an average of 209,000 per month over the past three months.

## ■ Inflation

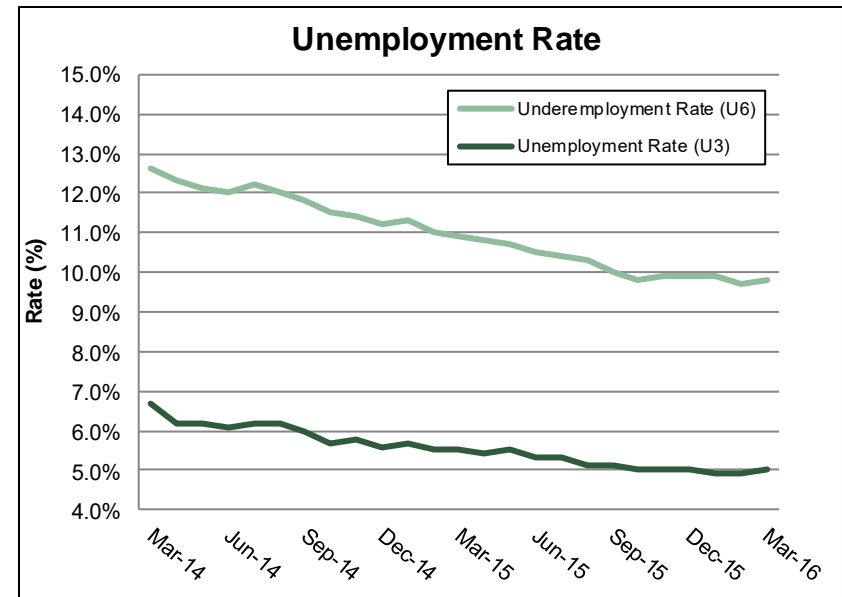
- Inflation pressures remain contained for now. Core PCE (excluding food and energy) was up 1.6% year-over-year in March. The PCE remains below the Fed's 2.0% target.

## ■ Economic growth

- The economy continues to grow at a moderate pace. First quarter 2016 GDP grew at a weaker than expected annualized pace of 0.5%, following growth of 1.4% in the fourth quarter. Market participants expected GDP growth of about 2.0% for all of 2016.



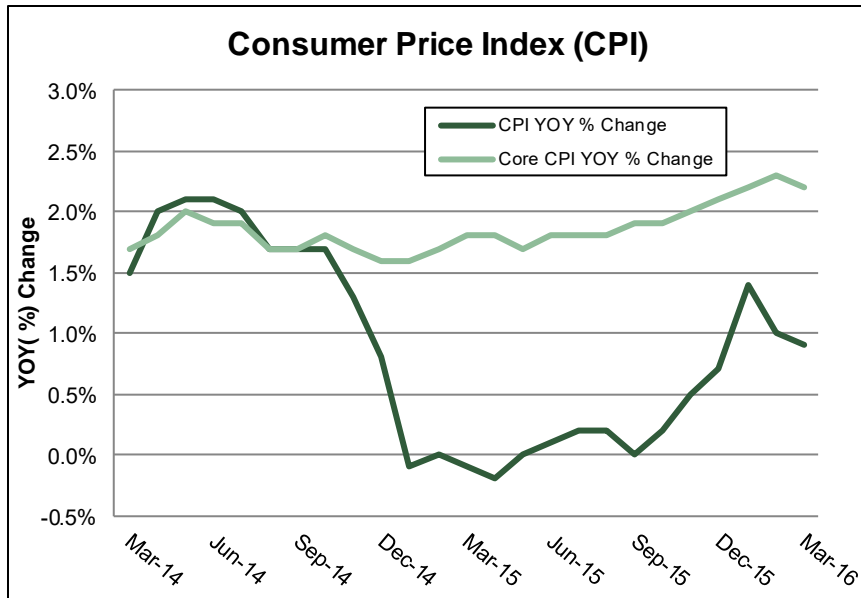
Source: US Department of Labor



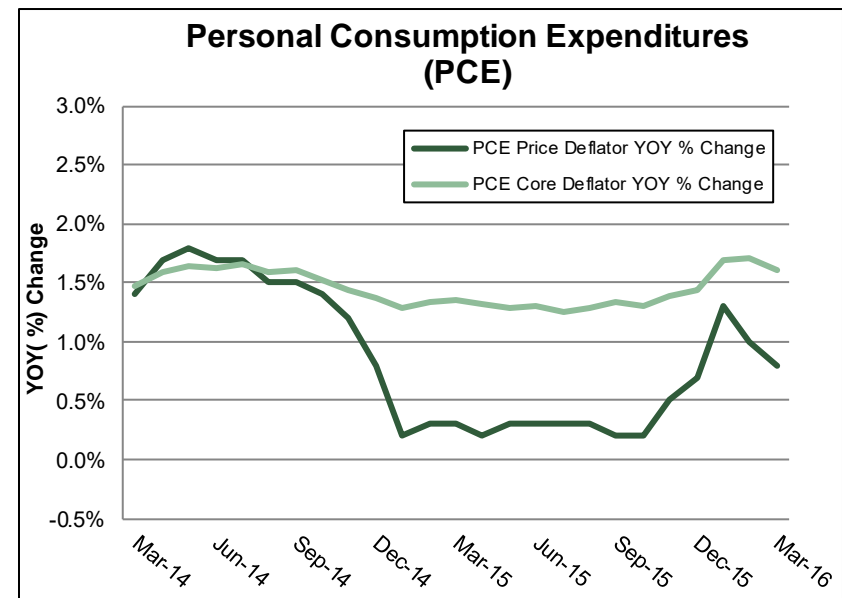
Source: US Department of Labor

- Nonfarm payrolls rose by 215,000 in March.
- The unemployment rate inched up to 5.0% from 4.9%.
- A broader measure of unemployment called the U-6, which includes those that are marginally attached to the labor force and employed part time for economic reasons, was 9.8%.



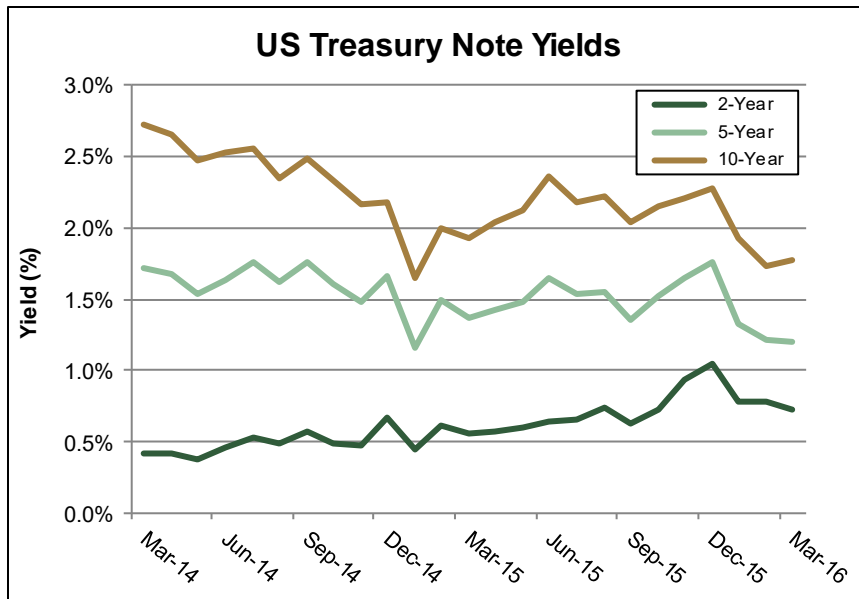


Source: US Department of Labor

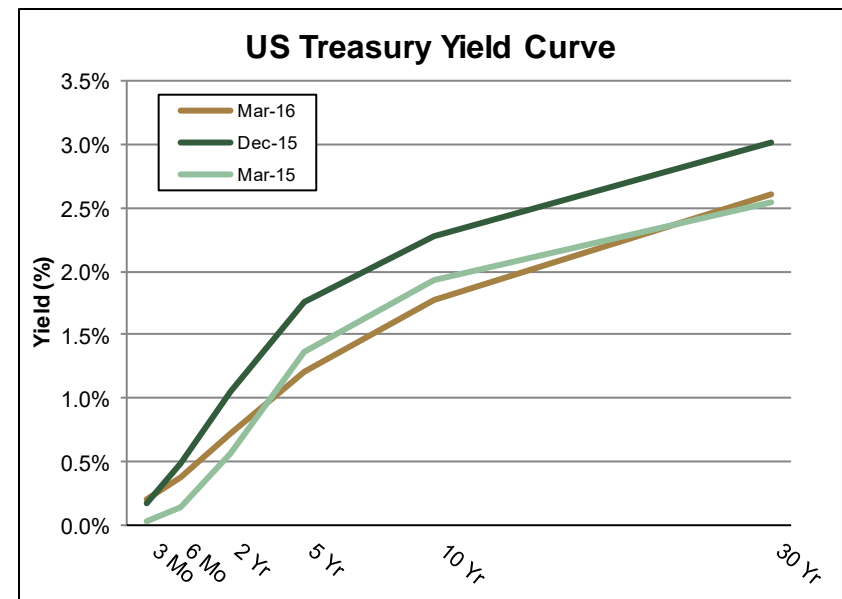


Source: US Department of Labor

- The Consumer Price Index (CPI) was up just 0.9% year-over-year in March vs. 1.0% in February.
- Consumption Expenditures (PCE) price index was up 0.8% on a year-over-year basis in March, vs. up 1.0% in January.



Source: Bloomberg



Source: Bloomberg

- During the first quarter, the yield curve flattened with the 2-year Treasury yield virtually unchanged and the 10-year Treasury yield down approximately.
- Over much of the past year, financial market volatility has been elevated due to weak global economic growth, volatile commodity prices, and divergent global central bank monetary policy. These concerns will likely continue to fuel financial market volatility over the medium-term.



**moulton niguel** water district

# WATER EFFICIENCY FUND FISCAL YEAR 2016-17 PROPOSED BUDGET

Finance and Information Technology Board Meeting

May 18, 2016

# PROPOSED MAJOR 2016-17 PROJECTS

- Direct Install Programs
- Rebates
- AMI
- Customer Portal
- Studies
  - UC Riverside
  - Stanford/Facebook
- RW Masterplan

# DIRECT INSTALL PROGRAMS

- UC Riverside Focus Groups
  - “Make it easier to participate in rebates”
  - “Water budget decrease time to participate”
- Target Outdoor Water Use
  - Smart Timers- \$350,000
  - Turf Removal- \$500,000
- Create a simple, low customer time investment to do water efficiency right



# AMI PILOT

- Hourly reads for 4,450 customers
  - All 1,300 RW Customers
  - All 1,350 Potable Irrigation Customers
  - 1,800 residential on past AMI system
- Test leak detection on full distribution system AMI deployment
- Customer portal
  - Provides near real time usage
  - Provides projected bill, water budget
- Evaluate for full District deployment



# PROPOSED REBATE BUDGET

Program	Funding Level (MNWD Only)	FY 2016-17 Budget
Turf Removal	\$2/sq ft	\$2,200,000
Residential Smart Timers	\$150/timer	\$200,000
High Efficiency Clothes Washers	\$200/washer	\$160,000
Drip Irrigation	\$0.20/ft	\$100,000



**moulton niguel** water district

# CAPACITY FEE STUDY UPDATE

Finance and Information Technology Board Meeting

May 18, 2016



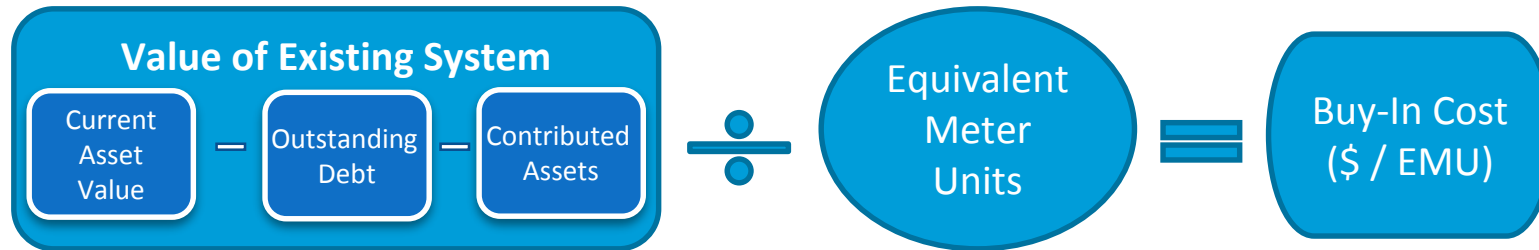
# CAPACITY FEE OVERVIEW

- Capacity Fees: fees on new development to pay their share of capital assets to “buy in”
- Current fees out of date
- Need for documentation and justification
- Engaged with Building Industry Association
- Subject to AB 1600 and codified in Water Code Section 66013
- Legal requirements:
  - Nexus between fee and benefit
  - In-depth study formalizes methodology based on industry best practices

# POLICY GOALS

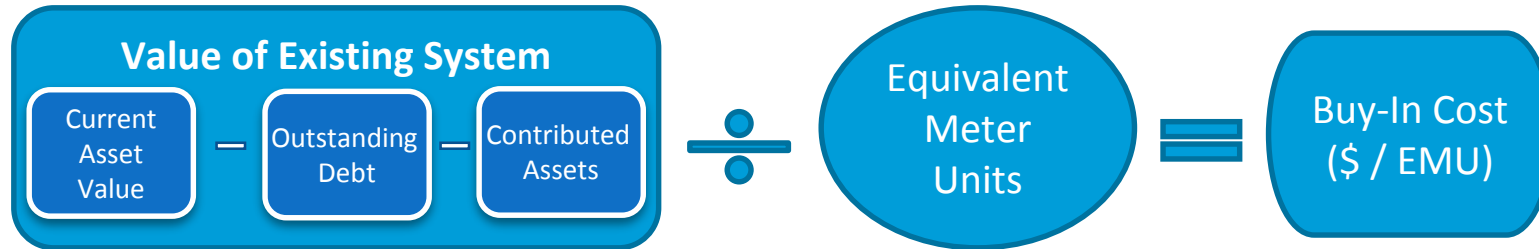
- Develop fees based on cost of service
- Maintain equity between new and existing customers
- New development pays for impact to reliability
  - Demand Offset Fee

# WASTE WATER CAPACITY FEE



- Current Asset Value (Waste Water System) = \$386 M
- Outstanding Debt = \$5 M
- Total Contributed Assets = \$258 M
- Value of Existing Waste Water System = \$123 M
- Equivalent Meters (accounts for capacity size) = 76,878
- Waste Water Capacity Fee = **\$1,597** per 1" Meter

# WATER CAPACITY FEE



- Current Asset Value (Water System) = \$498 M
- Outstanding Debt = \$79 M
- Contributed Assets = \$217 M
- Value of Existing Water System = \$202 M
- Equivalent Meters (accounts for capacity size) = 83,968
- Water Capacity Fee = **\$2,405** per 1” Meter

# DEMAND OFFSET FEE

- Current Board Policy to put all wastewater to beneficial use

=> Focus on Outdoor

- New Development outdoor use based on Model Water Efficient Landscape Ordinance (Updated Feb. 2016)
  - New Residential at 55 % of ET
  - New Non-Residential at 45 % of ET
  - Average annual ET past 8 years = 49 inches

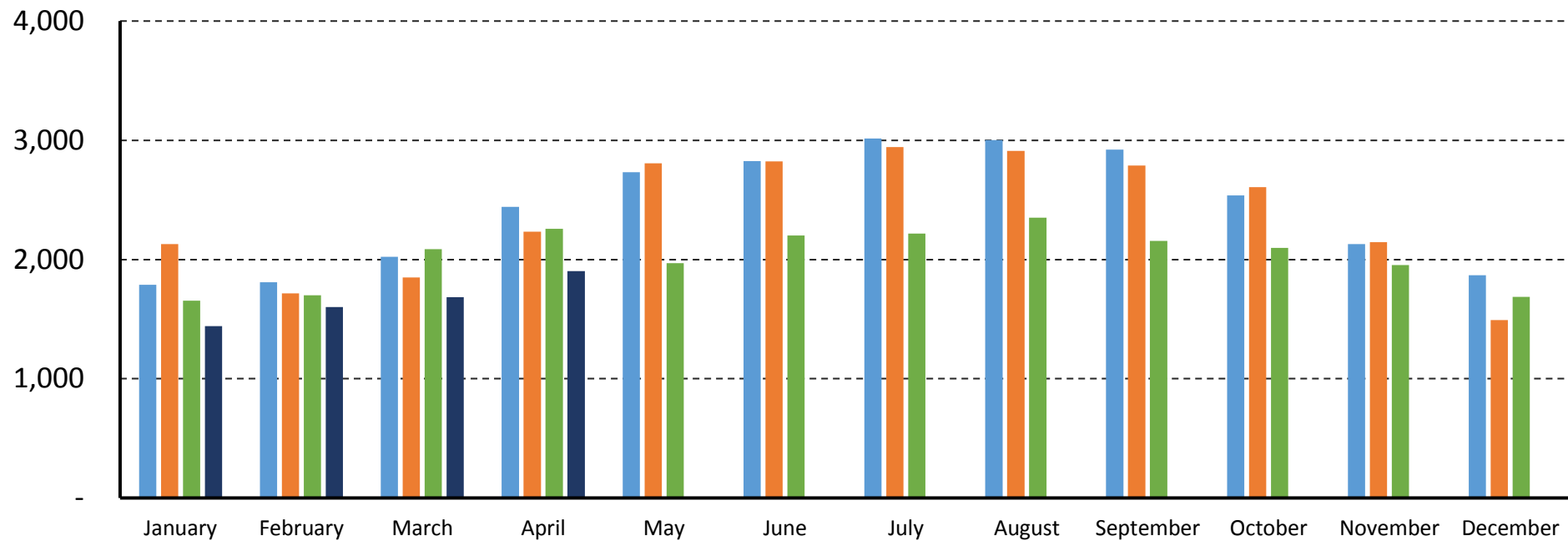
# DEMAND OFFSET FEE- USE OF FUNDS

- Total value of RW System divided by RW Production  
= Cost of RW new development to offset outdoor **potable** demand from new development
  - Residential Demand Offset Fee = **\$1,479** per **1,000 square feet** irrigated with potable water
  - Non-Residential Demand Offset Fee = **\$1,210** per **1,000 square feet** irrigated with potable water
- Customers who use RW for outdoor irrigation or have no outdoor irrigation **do not pay**
- New funds collected in Fund 6
- Use consistent with Board adopted policy goals
  - Water use efficiency programs
  - Water Reliability Projects

# NEXT STEPS

- Adopt proposed Capacity Fees in June 2016
- Additional work to do on User fees- revisit early FY 2016/17

# AF Historical Monthly MNWD Water Purchases & Evapotranspiration

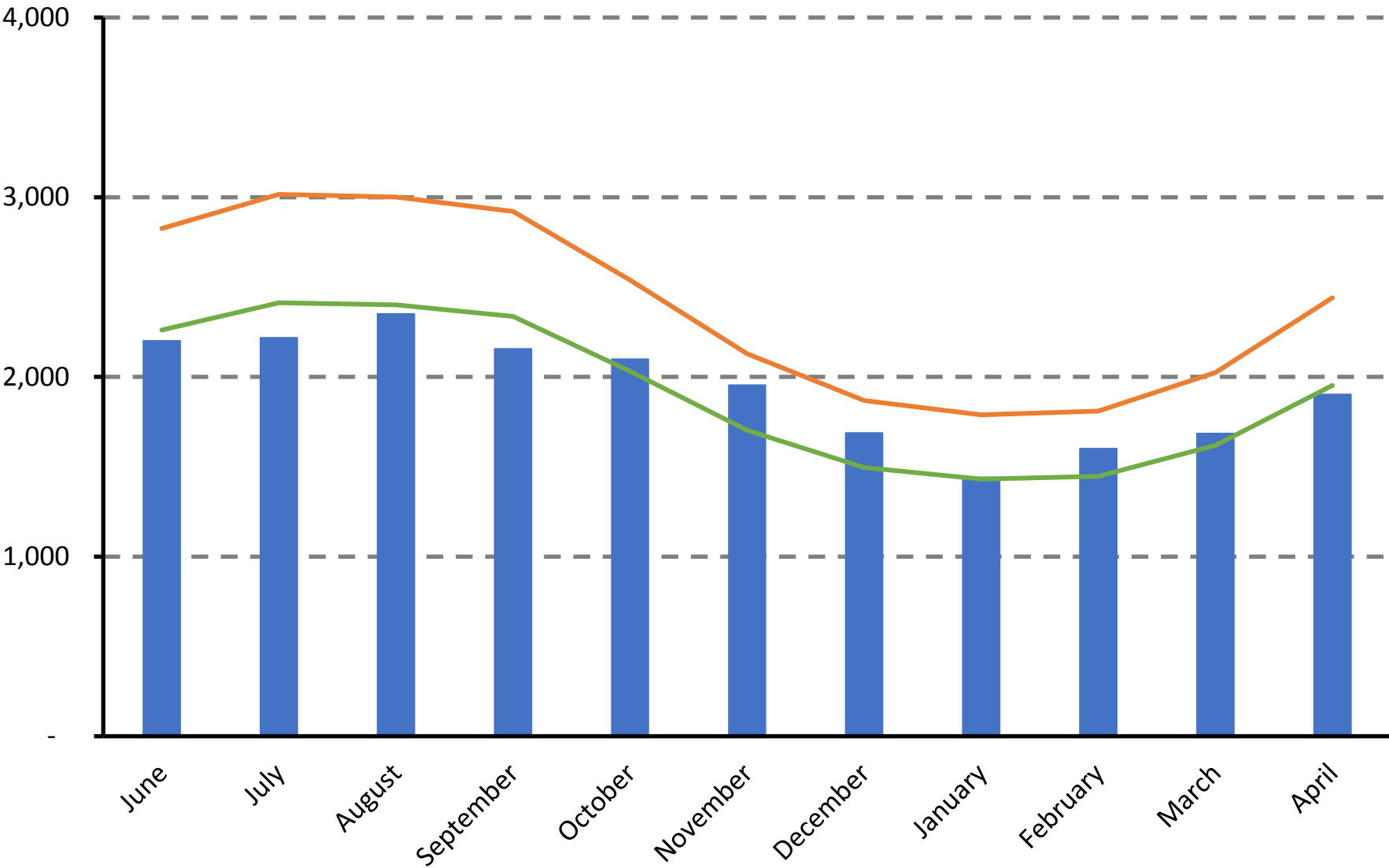


Year	ET (Inches)												
2013	2.54	2.88	4.08	4.79	5.99	6.07	5.81	6.53	5.26	3.92	2.52	2.49	
2014	2.82	2.64	4.09	5.54	6.39	6.45	6.54	6.23	5.21	3.94	3.16	1.91	
2015	2.52	3.02	4.96	5.31	4.48	5.75	5.69	6.27	5	3.88	3.24	2.35	
2016	1.87	3.82	3.98	5.16									



# SWRCB Monthly Target & MNWD Water Purchases

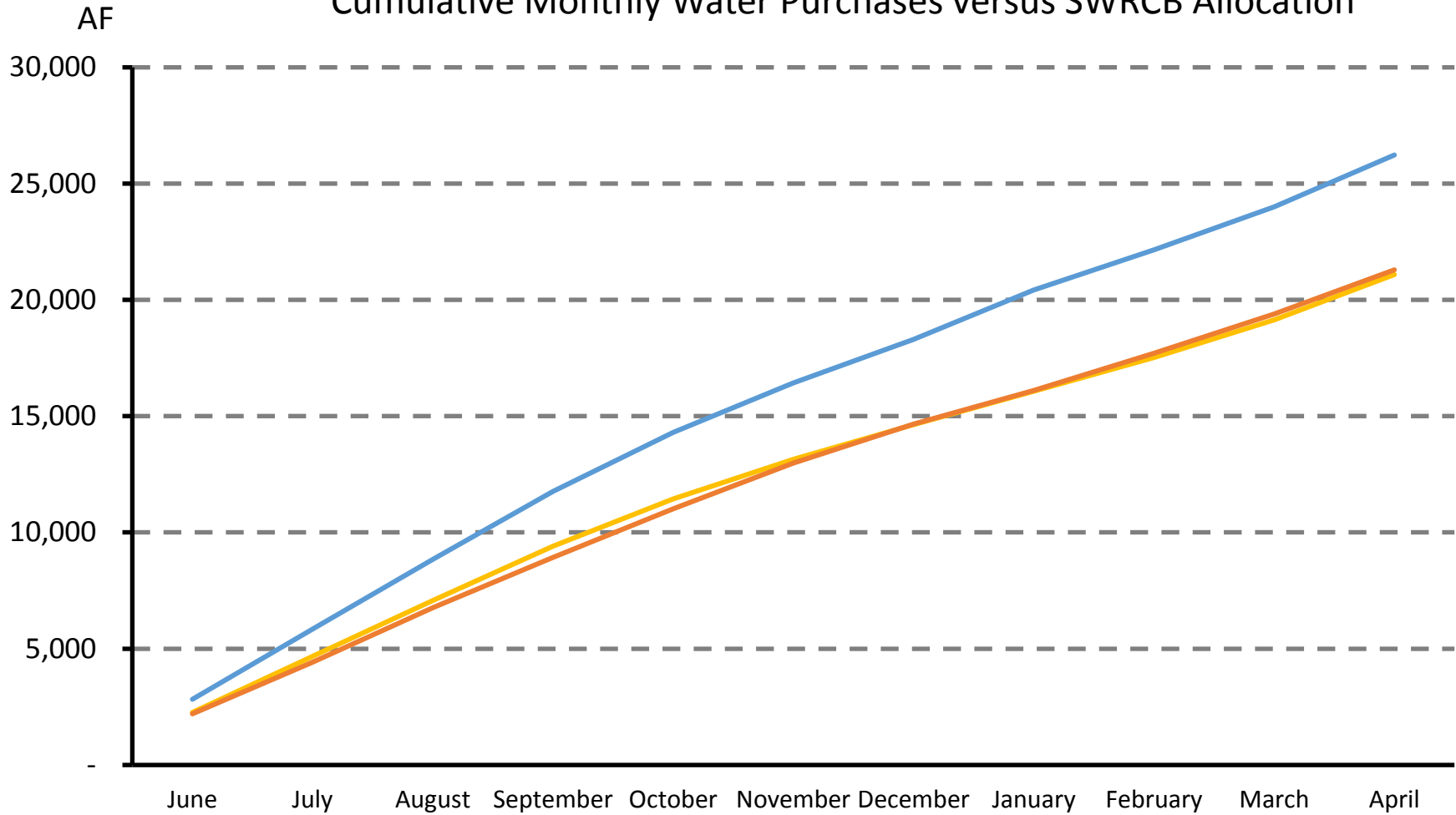
AF



■ 2015/2016 Production    — 2013 Production    — SWRCB Target

May 18, 2016

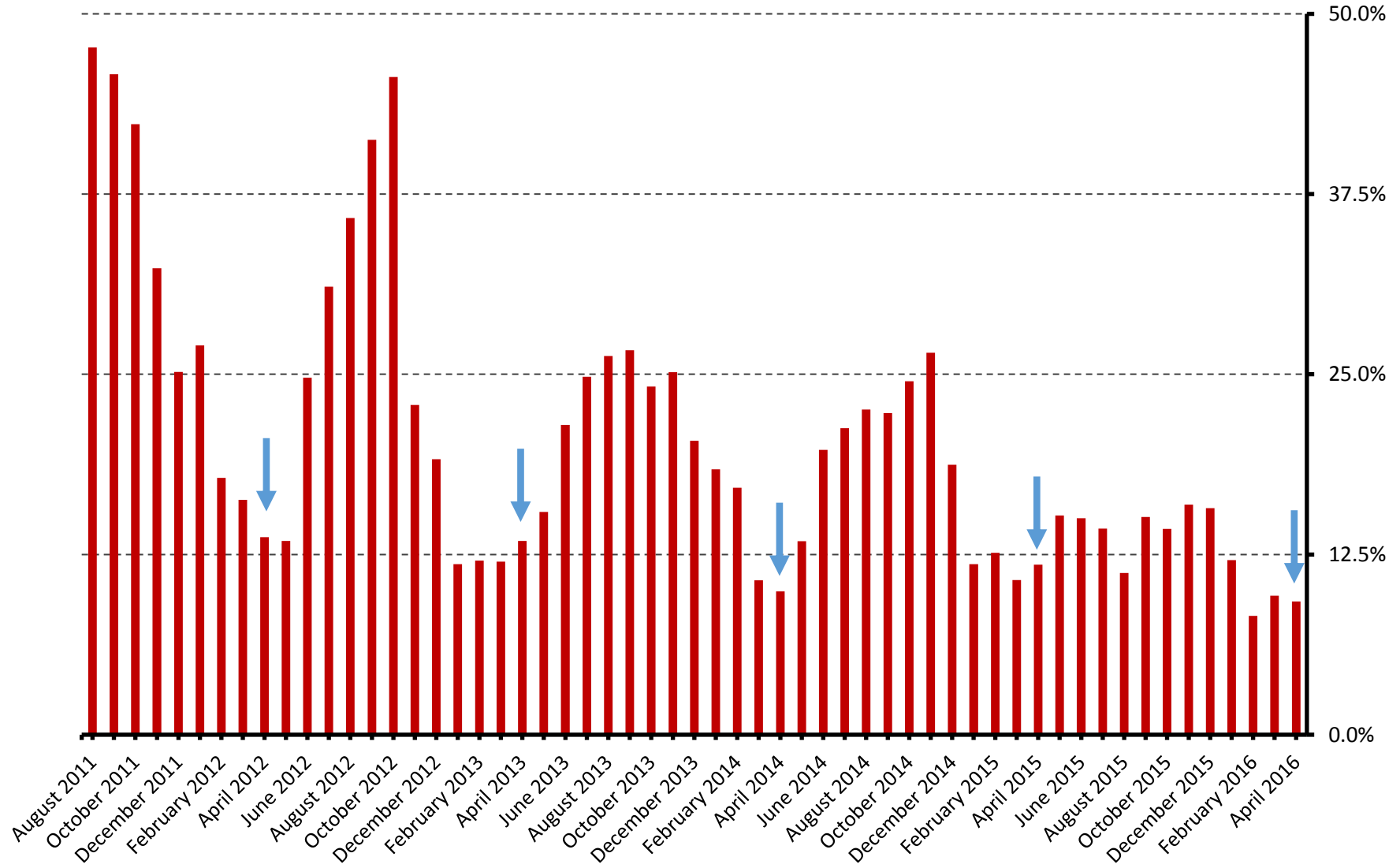
# Cumulative Monthly Water Purchases versus SWRCB Allocation



— 2013/2014 Production    — SWRCB Target    — 2015/2016 Production

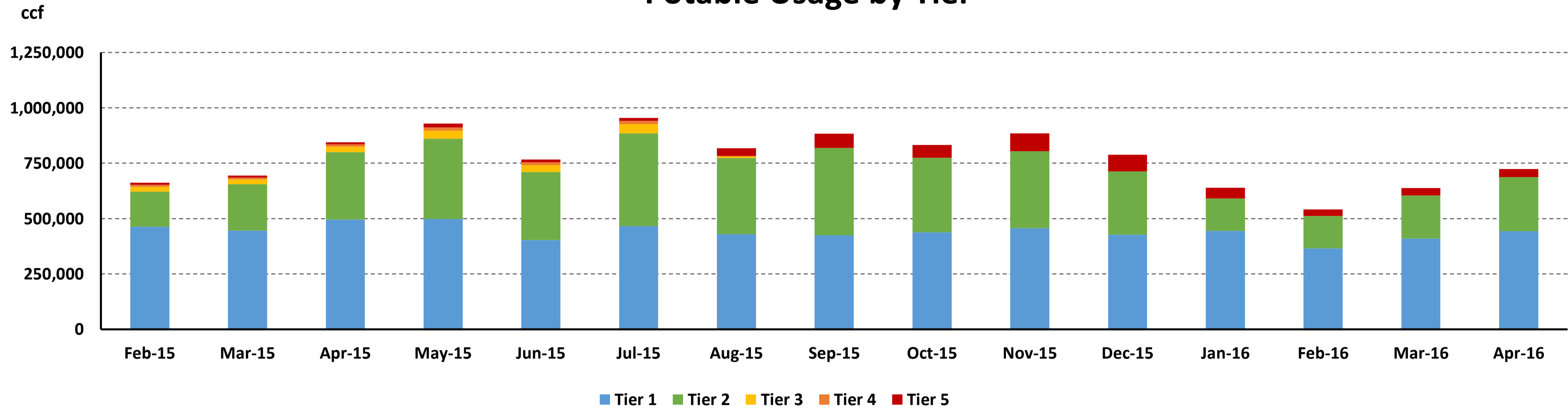
May 18, 2016

# Single Family Residential Accounts Above Tier 2



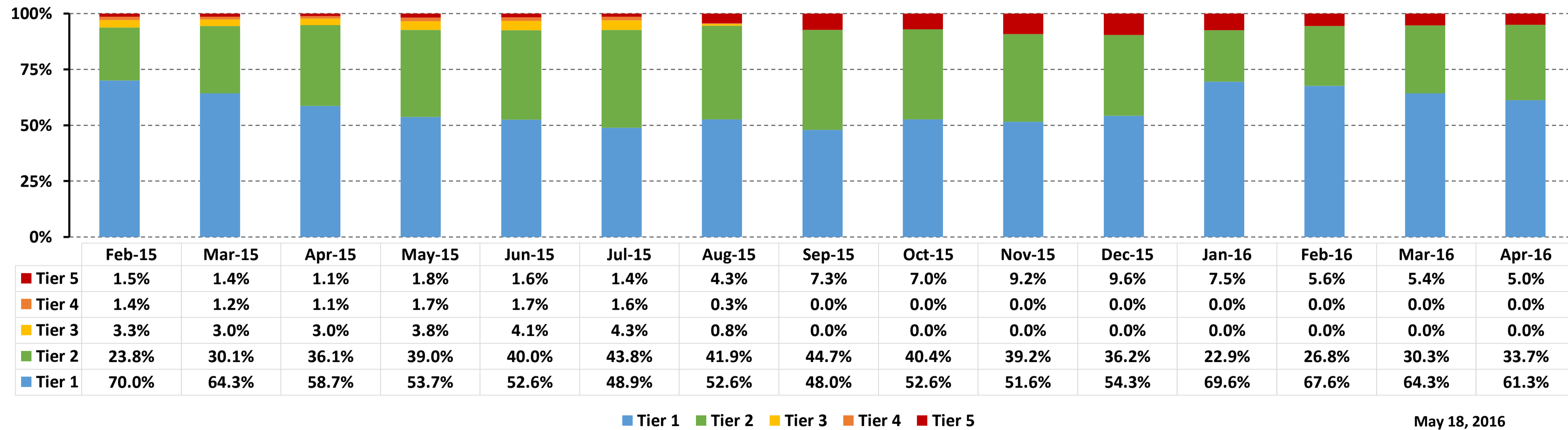
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## Potable Usage by Tier



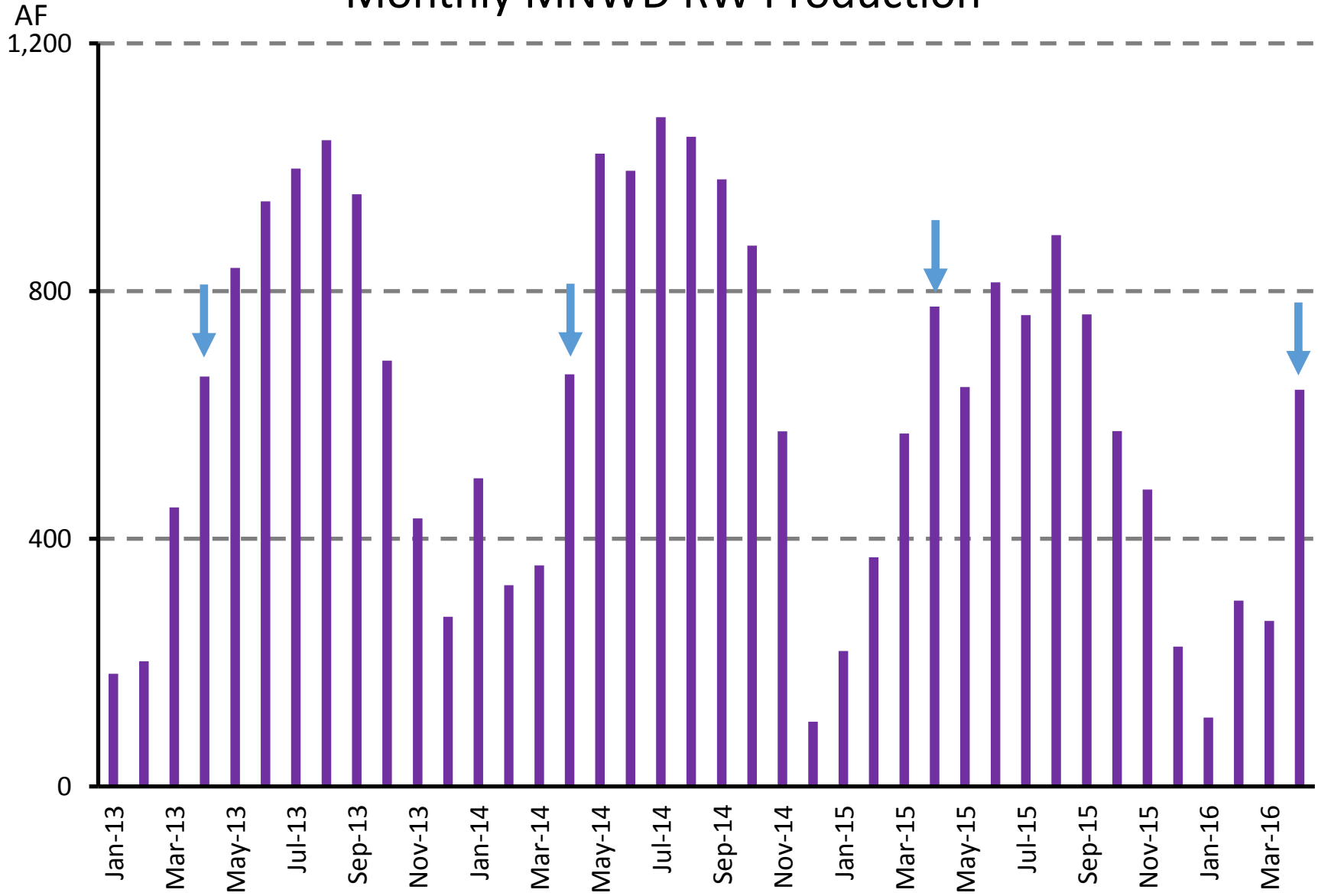
AF in Tier 3, 4, 5	94	89	101	154	131	159	102	148	134	187	173	110	70	78	83
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## Percent Potable Usage by Tier



May 18, 2016

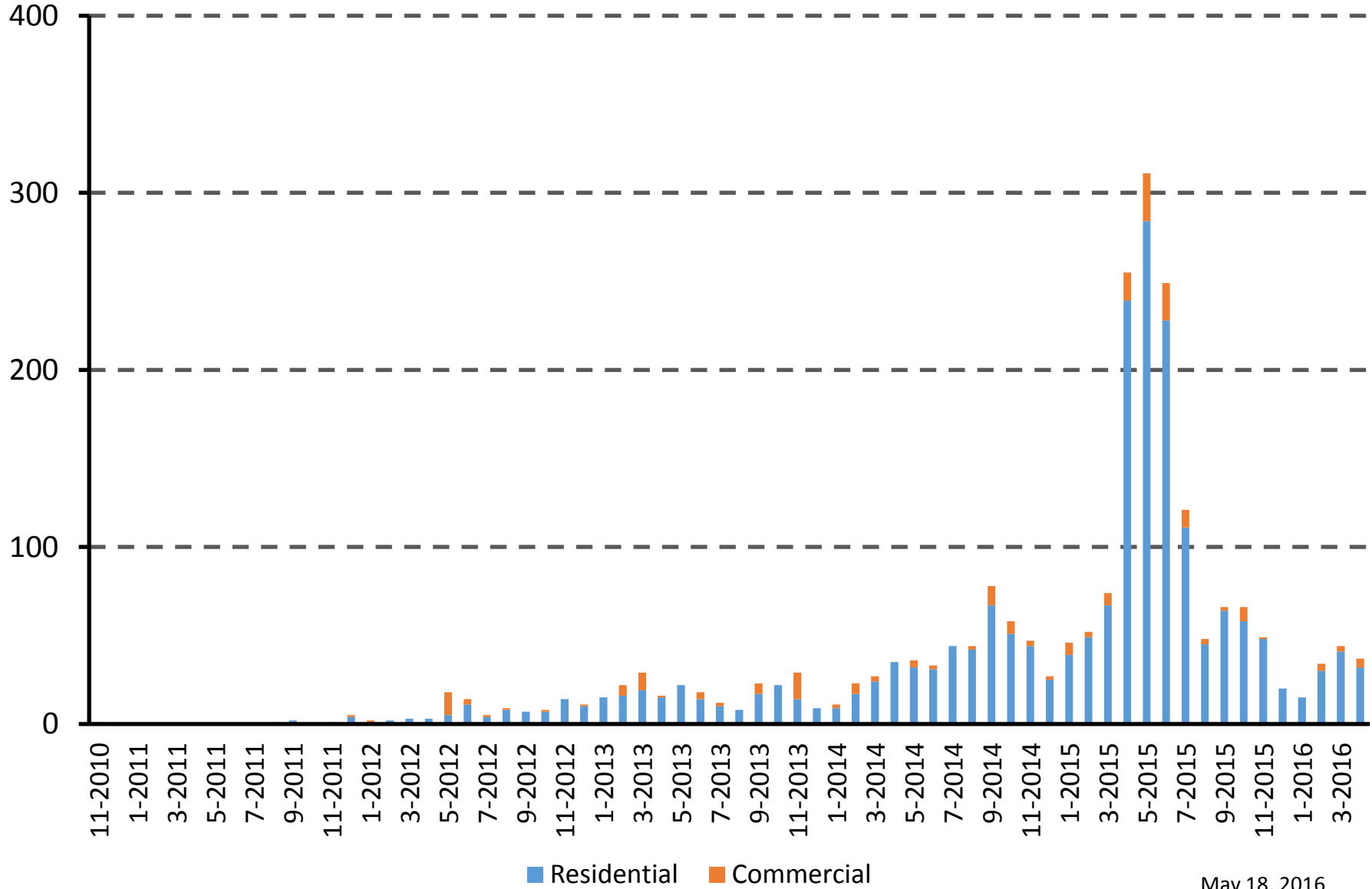
# Monthly MNWD RW Production



May 18, 2016

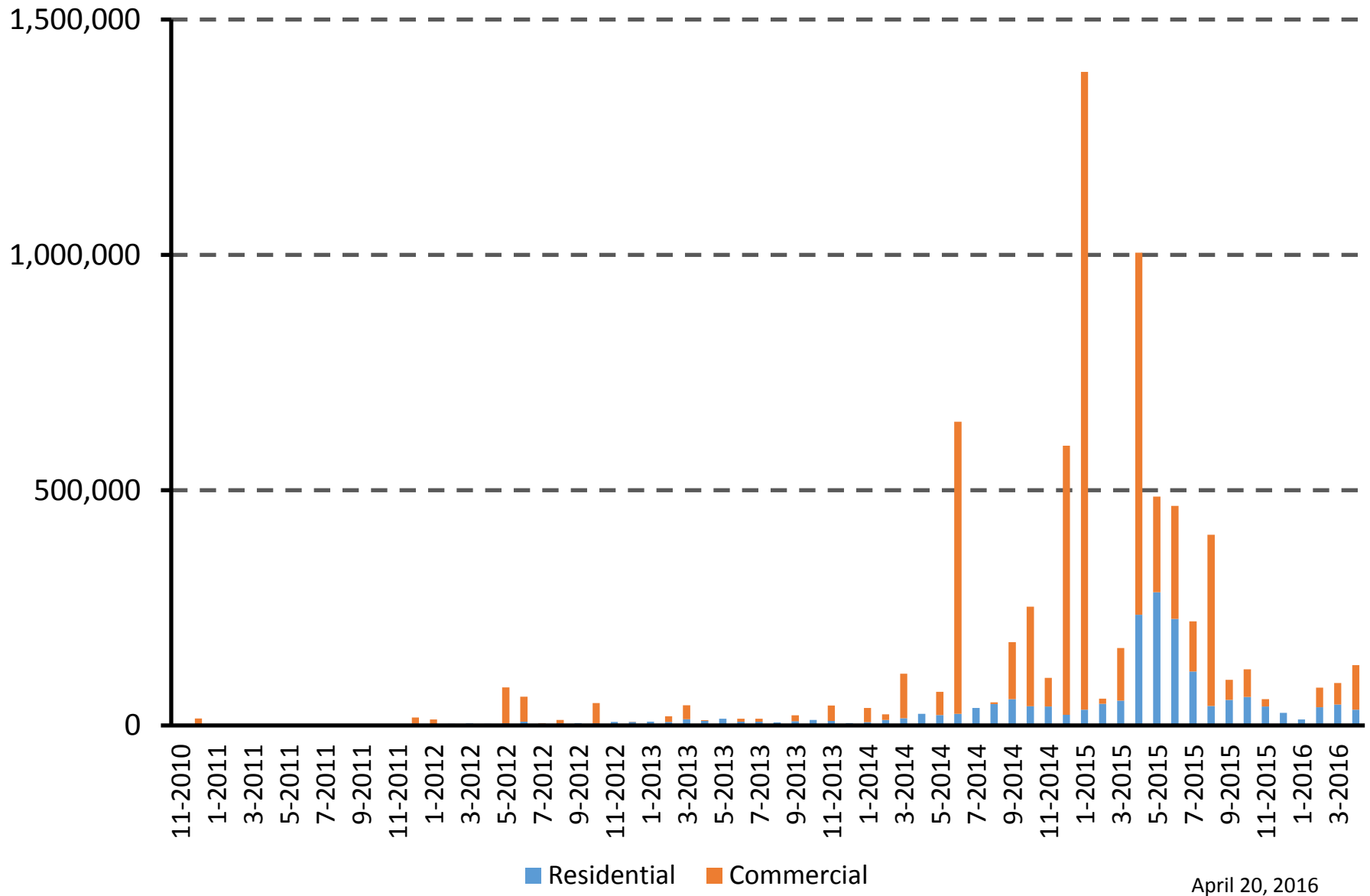
# Total Turf Removal Applications by Month

Applications



May 18, 2016

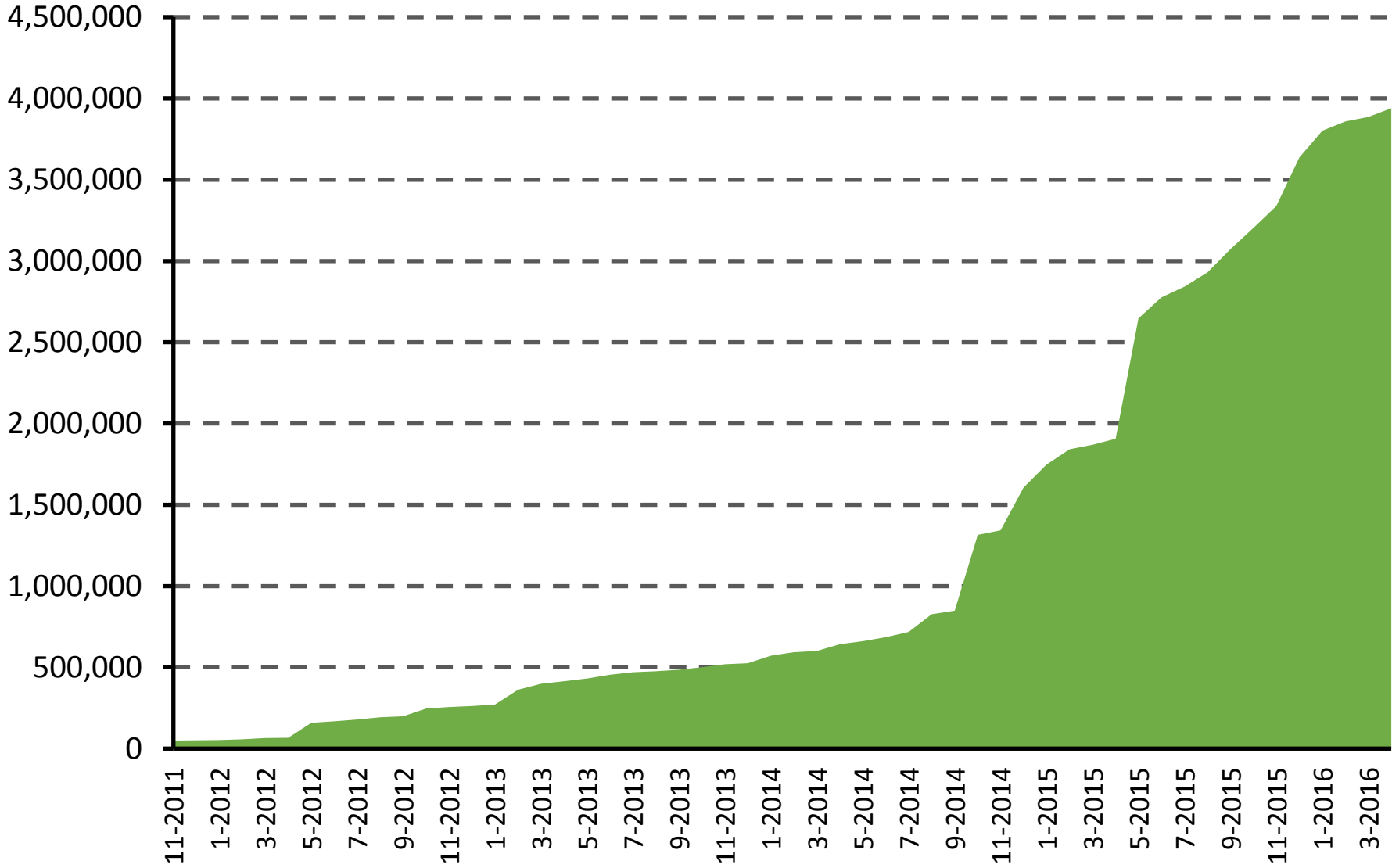
# Square Feet Total Turf Removal Application Size by Month



April 20, 2016

Square Feet

# Total Turf Removed



May 18, 2016